

REMARKS

The Examiner is thanked for the due consideration given the application. A terminal disclaimer is attached to this paper.

Claims 13 and 16-19 are pending in the application. Claim 13 has been amended to improve the language in a non-narrowing fashion.

No new matter is believed to be added to the application by this amendment.

Double Patenting

Claims 13 and 16-19 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 24-28 of copending Application No. 10/537,358.

A terminal disclaimer of copending Application No. 10/537,358 is attached to this paper. Withdrawal of this provisional obviousness-type double patenting rejection is accordingly respectfully requested.

Rejection Under 35 USC §103(a)

Claims 13 and 16-19 have been rejected under 35 USC §103(a) as being unpatentable over TSUCHIDA et al. (JP 2001-079857) in view of HOSHINO et al. (U.S. Patent 6,376,046). This rejection is respectfully traversed.

The present invention pertains to a mold conditioning sheet. This is exemplarily illustrated in Figures 1 and 2 of the application, which are reproduced below.

Fig.1

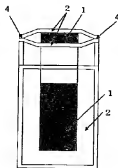
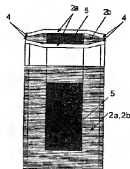


Fig.2



In the drawing figures, the numeral 1 indicates plate-shaped mold conditioning member X; 2, 2a, 2b and 2c, a base sheet having a porosity of 70% or more; 3, a heat resistant film; 4, a heat seal; 5, granular mold conditioning member Y; 6 and 6a, a base sheet having a porosity of 40% or less; 7, a thermoplastic film; 8, sheet-shaped molding member R; 9, plate-shaped cleaning member S; and 10, plate-shaped mold conditioning member Z.

Independent claim 13 of the present invention sets forth:

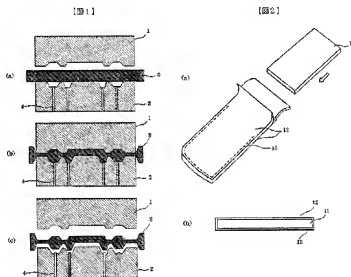
"A mold conditioning sheet comprising at least two base sheets, a mold conditioning component and a

molding member, the mold conditioning component and the molding member being enclosed between the two base sheets; wherein

the base sheets have a structure in which the base sheets include a fibrous base sheet having a porosity of 70% or more as an outermost layer of the mold conditioning sheet, and

the molding member is unvulcanized synthetic rubber and/or natural rubber, does not contain a vulcanizing agent and is heat melted during molding of said mold conditioning sheet."

The Official Action refers to Figures 1 and 2 of TSUCHIDA et al., which are reproduced below.



TSUCHIDA et al. indeed teach a mold conditioning sheet comprising at least two base sheets, enclosing a mold conditioning component and a molding member. However, the molding member used in TSUCHIDA et al. is different from that of

the present invention in respect to the following points (i) and (ii).

(i) The molding member taught in TSUCHIDA et al. has elasticity at normal temperatures (see paragraph [0016] of TSUCHIDA et al.). In contrast, the molding member used in the present invention has poor elasticity at normal temperatures because it is unvulcanized synthetic rubber and/or natural rubber.

(ii) TSUCHIDA et al. teach at paragraph [0011] that a molding member should be one that has a pressure transmission function during molding of a mold conditioning sheet. TSUCHIDA et al. further teach at paragraph [0016] that a molding member is preferably one that is repeatedly usable. In view of these teachings, the molding member used in TSUCHIDA et al. is not heat melted during molding of a mold conditioning sheet. In contrast, the molding member utilized in the present invention is one that is heat melted during molding of the mold conditioning sheet.

In the present invention, since *"the molding member is unvulcanized synthetic rubber and/or natural rubber, free from a vulcanizing agent, and heat melted during molding of said mold conditioning sheet,"* it exhibits moderate viscoelasticity when heat melted. As a result, the heat melted molding member moves the upper and the lower base sheets toward the upper and the lower sides of a mold, which brings the base sheets to be placed close to the cavity surface and thereby reduces chipping, and

eliminates such defects as incomplete filling of a cavity with the mold conditioning component which results from insufficient flowability of the mold conditioning component or insufficient pressure during conditioning (see paragraph [0031] of the present specification).

On the other hand, since the molding member used in TSUCHIDA et al. is not heat melted during molding of a molding conditioning sheet, it is unable to sufficiently fill a cavity with a mold conditioning component in case of insufficient pressure during molding.

In addition, attention should be drawn to that TSUCHIDA et al. was cited also by the IPEA during the international stage, but novelty and inventive steps have been acknowledged by the IPEA as a result of emphasizing the above points in the Written Replies filed in response to the Written Opinions of the IPEA.

Furthermore, as recognized in the Official Action, TSUCHIDA et al. are silent about the base sheets of the present invention, which have a structure where the base sheets include a fibrous base sheet with a porosity of 70% or more as an outermost layer of the mold conditioning sheet. To overcome this deficiency of TSUCHIDA et al., the Official Action cites HOSHINO et al., asserting that this reference teaches a cleaning sheet with highly porous outer layers which release greater than 70% of a detergent.

However, the cleaning sheet taught by HOSHINO et al. is used mainly for cleaning surfaces of glass, and therefore, is completely non-analogous to a mold conditioning sheet. What is disclosed with the cleaning sheet of HOSHINO et al. is a detergent, the main component of which is water and which contains surface active agent, alcohol, etc. This detergent totally differs from the mold conditioning component enclosed with the mold conditioning sheet of the present invention. As discussed above, HOSHINO et al. teach an invention which is completely unrelated to a mold conditioning sheet. Thus, a person skilled in the art would have never been motivated to combine HOSHINO et al. with TSUCHIDA et al., which teach a mold conditioning sheet.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of TSUCHIDA et al. and HOSHINO et al. A *prima facie* case of unpatentability has thus not been made.

Thus rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

The Examiner is thanked for considering the information disclosure statements filed August 22, 2006 and November 8, 2006 and for making the references therein of record in the application.

Prior art of record but not utilized is believed to be non-pertinent to the instant claims.

As no issues remain, the issuance of a Notice of Allowability is respectfully solicited.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Robert E. Goozner/
Robert E. Goozner, Reg. No. 42,593
Customer No. 00466
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

REG/lrs

APPENDIX:

The Appendix includes the following item:

- Terminal Disclaimer